Commonwealth of Massachusetts
Executive Office of Health and Human Services

Health Information Technology Council March Meeting

March 13, 2013

3:30-5:00 P.M.

One Ashburton Place, 11th Floor, Boston

Today's Agenda:

1. **Meeting Minutes/By Laws approval – John Polanowicz**

2. **Mass HIway Operations Update – Manu Tandon**

3. **Last Mile Program Update – Sean Kennedy**

4. **Phase 2 Update – Manu Tandon**

5. **Advisory Group Feedback - Micky Tripathi**

6. **Wrap up and next steps – Manu Tandon**

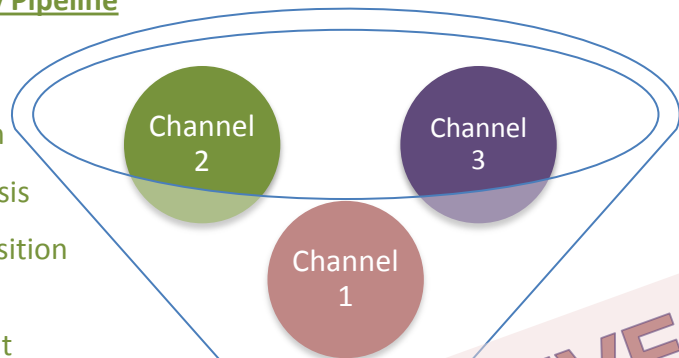**Discussion Item: Mass HIway Update**

THE HIWAY
MASSACHUSETTS HEALTH INFORMATION HIGHWAY

Channels

Opportunity Pipeline

Prospecting

Qualification

Needs analysis

Value proposition

Use case development

Gap analysis

Channel 2

Channel 3

Channel 1

ILLUSTRATIVE

Outreach and Connection processes will occur through Channels:
- Channels are being determined
- Each channel will have relevant mechanisms to support HIway adoption/use
- Entity leading each channel will depend on effort required

Operations

On Board ▸ Verify ▸ Provision ▸ Exchange ▸ Administer & Service

Once a provider or health organization is ready to exchange, HIway Operations completes the transaction through a set of highly automated processes including:

o **Onboard** is the process to connect including Participation Agreements, selection of services and identification of entity's administrators for the individuals allowed access to the HIway

o **Verify** is a critical process to authenticate the health entity and determine if the entity has a legitimate reason to exchange health information on the HIway...*maintaining the chain of trust*

o **Provision** are the processes to fulfill the order including invoicing, providing a trust certificate and allowing health entities to upload to the directory

o **Exchange** enables a health entity to use the HIway

o **Administer & Service** allows the health entity to administer their organization's use of the HIway

MA HIway Business Performance

MA HIway Operations Summary

Entities Connected	10	Participation Agreements Processed / Outstanding	12 / 0
Interest Calls	30	Invoiced $ / # of Entities	$231,6317 / 9
HIway Transactions	17	Business Operations Calls	42

Business Performance Management

1. Detailed metrics exist for each major process that rolls to the summary level
2. Automated workflow tracking will allow for detailed management of work in process, turnaround times and issues.

Recent highlights:

1. Implemented manual operational processes and preparing for full process automation
2. Developing RFQ for a process review /audit of Verification processes toward a quasi – Federal Bridge Registration Authority status
3. Upgraded customer base to the December release of LAND
4. Working on participation agreement amendments to provide more clarity from Phase 1 and to prepare them for Public Health and Phase 2
5. Working on a client facing Test environment to help facilitate onboarding

MA HIway Client Operations/Onboarding

Organization	Use Case	Target Date
Tufts Medical Center and Network Health	Discharge Summaries from Tufts Medical to Network Health for follow-up care	March 2013 – go live; in testing
BIDMC and DPH	Public health registries	April 2013
Department of Public Health – Immunization	Currently, 221 sites submit immunization data. Of the 221 sites, 175 are Walgreens – 40 to 50 other sites include Atrius, others	April 2013 – go live with functionality; gradual move-over of customers with new providers onboarded through HIway Operations /DPH
DPH– Syndromic, ELR and CBHI	Submission of public health registry data	April 2013
Dr. Greg Harris	Web mail exchange with providers from BIDMC, Faulkner, etc.	Services Provisioned
Holyoke Hospital	TBD; implementing a Direct transaction from their EMR	TBD – testing

MA HIway Client Operations/Onboarding

Organization	Use Case	Target Date
Department of Public Health – Opioid Treatment Providers	Approximately 14 clinics (several with multi-sites) /health programs treating drug addition submit ongoing assessments to Bureau of Substance Abuse Systems (BSAS)	May – June 2013 live date; in testing now
Partners	Submission of public health registry data; other use cases	TBD – working through operational use across the Partners organization
Pediatric Care Associates	Transaction exchange as part of an ACO with Baystate	TBD – awaiting a trading partner
MEDITECH	3 instances of MEDITECH with EOHHS – DPH, DMH and DDS. MEDITECH also has an estimated 50 installed sites within the Commonwealth including Metrowest/Vanguard	April- May 2013 – Meditech will send test direct transactions from its 3 new product releases to the HIway test site. Will work through roll-out post April - May
Harvard Pilgrim (HPHC)	Initial use case is for submission of lab data from a pilot group of providers to HPHC	TBD

HIway Technical Performance Dashboard

Security Monitoring	Incidents Detected		Vulnerabilities Detected		HIPAA Compliance	
Environment Security	Firewall Change/Threats		Routing Change/Threats		Other Threats	
Performance Results	Production Uptime (Goal: 99.9%)		App – Online Web /Web Service Avg. (Goal: 1.45 – 2.45 second)	June 2013	App – RT Internal and SaaS Avg. (Goal: .15 – 1 second)	June 2013
	Database Load Threshold Hits		Network Load Hits		Unscheduled Outages	
Application Defects	Simple - Received/ Processed	0/0	Medium – Received/ Processed	0/0	Complex – Received/ Processed	0/0
Technical Calls	Tier 1 Simple	8	Tier 2 Medium	3	Tier 3 Major	0
Escalations Received	None					

- **HIway has 24/7 security and performance monitoring of the environment**

- **Reporting across the environment will be received daily and escalations are sent when thresholds have been reached**

- **There are processes in place to escalate and notify HIway Operations of security incidents**

- **Data will be reported on Performance Results and Application Defects in April 2013, as the web portal and other functionality are released**

1) **HIE infrastructure**

   - LAND device maturation

2) **EHR vendor implementation of Direct standards**

3) **Market development of Direct infrastructure**

   - HISP definition

   - HISP-to-HISP trust fabric

Discussion Item: Last Mile Program Update

Last Mile Program | Active Opportunity Review (sampling)

Opportunity Name	Type	Stage	Use Case (initial)	Organizations Enabled
eCW, Dimock, BI	HISP-HISP	Needs Analysis	Discharge summaries - BI>Dimock	2
GE Healthcare	EHR Grant (large)	Proposal/Price Quote	Connecting to the HIway thru the EHR Grant	
Holyoke Medical Center	XDS	Technical evaluation	Referrals between partners	2
IMPACT	Community / LAND	Use case development	exercise IMPACT data sets via LAND or SEE	16
MAeHC & BI	Quality Reporting	Technical evaluation	Quality reporting	2
Berkshire & Baystate	Western MA	Needs Analysis	Cardio referrals	3
ComChart Medical Software	EHR Grant (small)	Needs Analysis	Referrals between partners	4
CRICO Grant - Atrius & CHB	External funding source	Use case development	Referral loop closure	2
EasCare Ambulance	Less served	Value Proposition	Ambulance referrals	1
UMass Memorial Health System	Internal HIE	Qualification	Internal HIE	1
And many others totaling…			**~110 Unique, ~$520K subscriptions**	

- ## HIway Implementation Grants
  - $2M; will issue awards up $75,000 each
    - Release date ~3/15
    - Notification of award date ~5/3
  - Fund projects that 'catalyze connections' to the Mass HIway by migrating existing processes away from paper-based exchanges and those exchanges using proprietary interfaces.

Last Mile Program | HIway Implementation Grant Timeline

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Post Grants          Applications          Award                Milestones          Funding              Grant Period
3/15          →      Due          →        Notification   →     1-3          →      Ends          →      Ends
                     4/16                   5/3                  Complete             1/31/2014            ~5/2014
                                                                12/31
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Flow cycle:

Compliance Review / Organize Apps
4/16-17

Application Evaluation + Review / Rank Order
4/17-22

Notification of Award
5/3

Last Mile Recommendation to External Review
4/22

Final Approvals
4/25-5/3

External Review
4/22-25

Three stage review:
- Compliance (MassTech Procurement)
- Evaluation + Recommendation (LMMO)
- Approval (External Review Team)

- EOHHS
- a member of the HIT Council
- a leader from a non-MA statewide HIE

Milestones

- M1 - Participant Agreement signed by all organizations that will be exchanging data;
- M2 - Initial Participant Directory entries loaded for all trading partners - at least one (1) entry per organization;
- M3 - Test transaction success among all trading partners (confirmed by HIway Ops);
- M4 - HIway production transactions exercising the identified use case.

- EHR Interface Grants
  - $1.5M; will issue awards up $75,000 each
    - Release date   April
    - Notification of award date   May-June
  - Fund EHR vendors to develop and implement a Direct messaging solution in the workflow of their EHR systems

Discussion Item: Phase 2 Update

Phase 1

Send and receive
• Create infrastructure to enable secure transmission ("directed exchange") of clinical information
• Will support exchange among clinicians, public health, and stand-alone registries
• Focus on breadth over depth

Phase 2

Search and retrieve
• Create infrastructure for cross-institutional queries for and retrieval of patient records
• Add additional public health services

Mass HIway 2 phase strategy

	Phase 1	**Phase 2**
HIE components	• Provider directory • PKI infrastructure • Direct/HL7 gateway • Web portal mailbox	• Master Person Index • Record locator service • Consent database • Query/retrieve infrastructure • Patient-directed messaging

HIE users	• Any TPO participant
	• Public health
	    • SS, CBHI, MIIS
		• Any TPO participant that chooses Phase 2 services
		• Public health
		    − ELR, PMP, Opioid, Lead
		• Possibly Medicaid/HIX participants (patient messaging)

Deployment and Operation
(EOHHS and MeHI Last
Mile Program)

Detailed Planning
(EOHHS with Advice from HIT
Council & Advisory Groups)

3 ways to connect to Mass HIway Services

User types

Physician practice

Hospitals
Long-term care
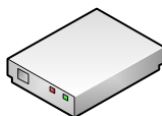Other providers
Public health
Health plans
Labs/imaging

Patients

3 HIE Access Methods

EHR or PHR connects directly

EHR connects through LAND

Browser access to HIE portal and webmail inbox

HIE Services

Phase 1

Provider directory

Certificate repository

DIRECT gateway

Web portal mailbox

Phase 2

Master person index

Consent database

Record locator and retrieval service
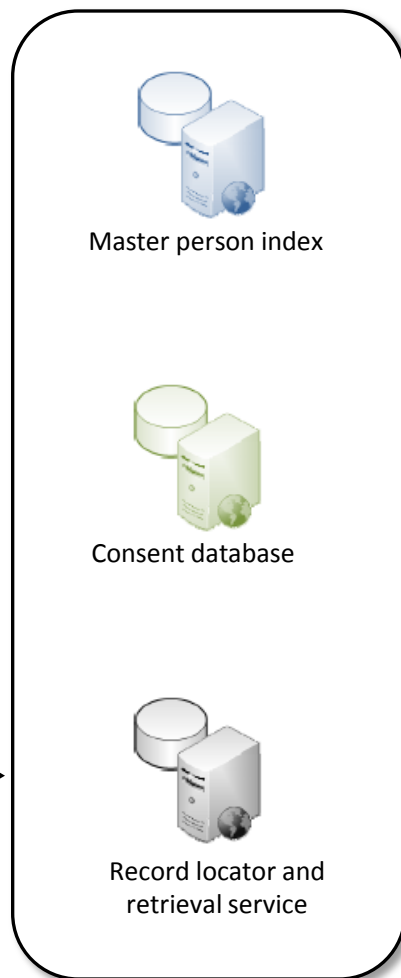
Phase 2 Component Description

Users

Phase 2

HL7 ADT

Entities decide query-response method

Master person index

Consent database
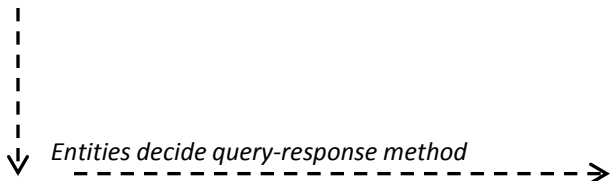
Record locator and retrieval service

- Probabilistic patient matching using Initiate system
- Only provide matches that are "direct hits"
- No "fishing" or wildcard searches allowed

- Patient provides consent for organization to respond to queries
- Consent captured at organization and status sent to Mass HIway in HL7 ADT message

- Record locator shows only those organizations that patient has authorized to respond to queries
- Preferred query and response method determined by data-holding entity

Four Query-Retrieve Methods will be available

User types

Physician practice

Hospitals
Long-term care
Other providers
Public health
Health plans
Labs/imaging

Patients

**Phase 2
HIE Services**

Master person index

Consent database

Record locator and
retrieval service
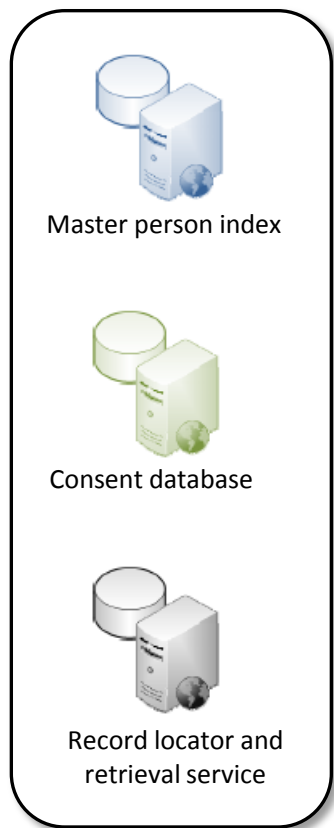
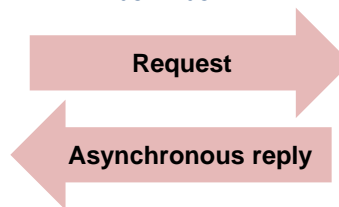**Four Query-Retrieve Methods**

Manual retrieve
- Find record location through HIE portal
- Retrieve records manually (phone, fax, other)
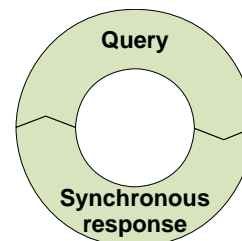
Cross-entity viewing
- View other EHR within own EHR or HIE Portal
- No data or documents exchanged
- Single-sign on across systems
- Used by Atrius, BI, others today

"Push-Push"
Request
Asynchronous reply
- Use existing Direct standards for manual request-reply
- Email-like functionality
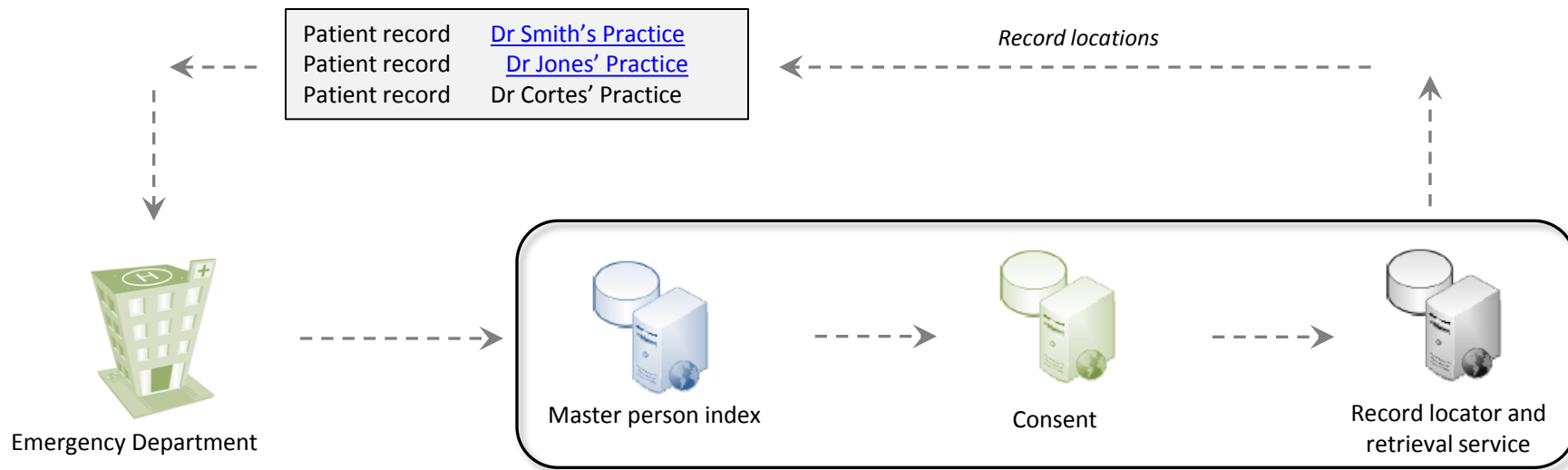- Does not require new standards – leverages Stage 2 MU

"Query-response"
Query
Synchronous response
- Query with automated response
- Like electronic eligibility or RX history requests
- Requires new standards beyond Stage 2 MU

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1 Locate Record

Patient record	Dr Smith's Practice
Patient record	Dr Jones' Practice
Patient record	Dr Cortes' Practice

Record locations

Emergency Department

Master person index

Consent

Record locator and retrieval service

Patient Medical Summary

2 Request record

3 Confirm patient consent

Request

Dr Smith's Practice

4 Retrieve record

Response

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Mass HIway Phase 2 high level project schedule

Activity	Completion date
Submit IAPD to CMS	Complete
CMS approval of Phase 2 IAPD	March 2013
Phase 2 contract (or change order) executed	Apr 15, 2013
Go-live - Public Health - Immunization Registry Node	April 28 2013
Go-live - Public Health - Reportable Lab Results (ELR) Node	April 28 2013
Testing - Public Health - Syndromic Surveillance Node	April 12 2013
Go-live - EOHHS – Children's Behavioral Health (CBHI) Node	May 2013
Go-live for Phase 2, Release 1 (Other Public Health interfaces)	May-Oct, 2013
Go-live for Phase 2, Release 2 (CDR, EMPI, RLS, Consent)	Oct 2013 – Mar 2014

Discussion Item 4:

Advisory Group Update – Stakeholder feedback

Advisory Group Inputs

- **Four Advisory Groups launched**
  - Consumer
  - Legal/Policy
  - Provider
  - Technical

- **Advisory Groups meet regularly to provide input/reaction to key policy and design decisions**
  - Process adapted to reduce time burden on volunteer participants
  - AGs react to key questions/issues and provide input but not formalized recommendations
  - HIT Council review inputs to confirm HIway is responsive to stakeholder concerns

Summary of Input and Feedback from the Provider Advisory Group (3/26/13)

- The architecture looks great but the devil will be in the details – suggest careful attention be paid to interfaces, interoperability, and consent

- Record locator service (RLS) has standalone value – most valuable to ED providers that need to locate data sources quickly and for streamlining bi-lateral information sharing solutions (e.g., "Magic Button")

- Providers will be more likely to use phase 2 services if they don't have to sort through slew of documents to find relevant information – Suggest that each participating phase 2 HIway members make a standard summary document (e.g., CCDA) available for query

- Mass HIway can help establish a "community standard" for health information sharing (e.g., A common consent policy)

- Support the idea that the HIway stays flexible to different levels of technology maturity and different levels of comfort with information sharing – for example, RLS may point a user to a fax/phone number or support fully automated query among trusted partners (consistent with what is currently in the market with Epic to Epic information sharing and MDPHnet)

- Support the idea that HIway continues to help providers meet Meaningful Use goals (e.g., Requirement for sending Care Summaries)

Summary of Input and Feedback from the Consumer Advisory Group (3/26/13)

- A technical change should be made to add a consumer representative to the HIT Council
- Consumers should be informed of Mass HIway plans as soon as possible – Advisory Group members can support outreach efforts
- Mass HIway should publicly post a list of providers who are connected to the Mass HIway so that consumers may choose a provider based upon this information
- Pros and cons for key decisions should be defined so stakeholders may weigh tradeoffs
- Project leaders should balance deployment speed with stakeholder input gathering efforts – there is a need to let patients into the conversation in a real way, elicit feedback, incorporate suggestions, and build trust
- A new shared understanding of consent needs to be cultivated given that the concept has evolved a lot since originally conceived in earlier Massachusetts HIE planning efforts
- Presentations should be updated to be patient centric
- Suggest using a tiered consent model that allows full access for ED providers
- Suggest that FAQs and patient education materials continue to be reviewed by the Consumer Advisory Group – specifically the FAQs that originated with the Consumer Work Group and that are being finalized by MeHI

Summary of Input and Feedback from the Technology Advisory Group (3/26/13)

- The division and sequencing of services, record location then query, is the right approach
- The HIway should clearly define who is liable for a data breach of the master person index (MPI) given that a copy of patient demographic, record location, and consent data will be housed by HIway
- Since much of the success of HIway Phase 2 services rests on the MPI, risk mitigation strategies should be determined
- There is a need to define the policy for treatment of patient demographic data
- Suggest an investigation of the LAND box for organization level consent filtering

Summary of Input and Feedback from the Legal and Policy Advisory Group (3/27/13)

- The Mass HIway should be aware that there may be multiple processes emerging among community and statewide HIE efforts

- The Mass HIway should try to remove barriers to receiving patient demographic data - There are complexities that can hinder progress such as determining if and how consent may apply to demographic information

  - The Commonwealth could invoke its public health powers and require providers to send demographic data (This is consistent with State of Maryland's policies)

  - Similarly, submission of demographic information could be mandated by MassHealth

Discussion Item: Wrap up and next steps

HIT Council meeting schedule

HIT Council 2013 Meeting Schedule*:

- January 14 – 11th Floor Matta Conference Room
- February 4 – 11th Floor Matta Conference Room
- March 13 – 11th Floor Matta Conference Room
- **April 8**
- May 6
- June 3
- July 1
- August 5
- September 9
- October 7
- November 11
- December 9

All meetings to be held from 3:30-5:00 pm at One Ashburton Place, 21st Floor, Boston, unless otherwise noted

Next HIT Council Meeting: April 8, 2013

Preliminary Agenda:

- Mass HIway Update

- Last Mile Program Updates

- MeHI FY2014 Electronic Health Records Plan Preview

- Advisory Group Updates

Immediate next steps:

- Advisory Group "deep dive" discussions beginning week of March 25